

ABSTRACT OF THE DISCLOSURE

A method is disclosed for treating blood vessels using endovascular techniques to deliver laser energy. Percutaneous
5 access into the vein lumen will be obtained using an angiocatheter through which a fiber optic line will be introduced. The vein will be emptied of blood using elevation of the limb, patient positioning, compression, or other means. Laser energy will be delivered into the vein lumen using
10 wavelengths from about 532 nanometers to about 1064 nanometers. Sufficient power and duration will be used to damage the entire thickness of the vein wall, ultimately causing fibrosis of the treated blood vessel. Fibrosis of the treated blood vessel causes the blood vessel to decrease in diameter or collapse.